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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,344

05/23/2005

Jan De Kroon

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05/17/2006

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EXAMINER

RAZA, SAIRA B

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/511,344

Applicant(s)

DE KROON ET AL.

Examiner

Saira Raza

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5 and 8-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,8-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 5, 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmitz et al. (Us 2002/0082352).

4. Schmitz discloses multilayer composites, where a polyamide adhesive layer bonds a polyolefin molding composition (abstract). The polyamide includes a branched polyamine-polyamine polymer, and the polyolefin layer includes polypropylene (PP) or linear low-density polyethylene (LLDPE (§ 32-42, 52)). Hence, Schmitz would envisage the polyolefin layer solely comprising LLDPE. In reference to claim 10, it is the examiner's position that since the polyolefin layer of Schmitz is identical to that claimed by applicant, then the polyolefin layer of Schmitz possesses the good bubble stability property, as claimed by applicant. In reference to claim 8, Schmitz discloses that the polyolefin can be prepared by, for example, the Ziegler –Natta process, which can result in the formation of linear polypropylene. Hence Schmitz would envisage using linear PP in the polyolefin layer.

### *Claim Rejections - 35 USC § 103*

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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6. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitz in view of Johnston (US 4,654,240).

7. The Schmitz reference applies as above. However Schmitz fails to disclose the thickness of each layer. Hence attention is directed towards the Johnston reference. Johnston discloses that the multilayer film has a total thickness of about 75 to about 200 microns. The inner layer comprising either LLDPE or polypropylene has a thickness of about 50 to about 120 microns. The core layer comprising polyamide has a thickness of about 15 to about 50 microns. Johnston discloses that the combined dimensions of the core, inner and outer layers provide an improved container, if the total thickness is less than 75 microns the impact strength will not be sufficient, and if the total thickness is in excess of 200 microns the container will lack flexibility. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to form the multilayer film, comprising the composition of Schmitz, in the dimensions taught by Johnston in order to ensure sufficient impact strength and flexibility.

8. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitz in view of Bayer. For the purpose of this Office Action, the examiner refers to the English language equivalent, Joachimi et al. (Us 6,566,486).

9. In reference to claim 16, Schmitz discloses that various hollow articles can be formed of the multilayer film, such as pipes or containers. However, Schmitz fails to disclose that the multilayer article is formed via blow molding. Hence attention is directed to Bayer, which discloses that blow molding is suitable for the formation of hollow articles. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have formed a blown film comprising the multilayer article of Schmitz via blow molding. The motivation is to utilize a commonly known method of processing polyamide and polyolefin multilayer films.

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10. In reference to claim 17, it is the examiner's position that the blow-up ratio of the blown film is a readily manipulatable parameter. One skilled in the art of blow molding would be able to control the blow-up ratio to yield the desired product.

11. Claims 1 and 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayer in view of Johnston.

12. Bayer discloses branched polyamide molding materials that are applied to polyolefin layers to form multilayer films (Col. 2, Line 43 to Col. 3, Lines 25; Col. 6, Lines 15-23). Blow molding is noted as a preferred production method for the multilayer films (Col. 5, Line 64 to Col. 6, Line 7).

13. Bayer fails to specify polypropylene or LLDPE as the polyolefins. Hence attention is directed towards the Johnston reference (Column: Lines: abstract; 2:32-58; 3:68-4:4, 4:21-35, Table 1). Johnston teaches laminate films comprising outer polyolefin layers and a polyamide core layer. The reference teaches that containers are to be formed from the films, and that sterilization temperature controls the selection of the heat sealing inner layer. LLDPE and polypropylene layer are both suggested for the inner layer. LLDPE is also chosen when the sterilized medical product is filled in the container. Polypropylene is one of two materials to be used for the outer layer, especially linear biaxially oriented polypropylene. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to bond the polyamides of Bayer to either or both of polypropylene and LLDPE to provide a sterilizable container usable at a desired sterilization temperature.

14. In reference to claims 22-25, Johnston discloses that the multilayer film has a total thickness of about 75 to about 200 microns. The inner layer comprising either LLDPE or polypropylene has a thickness of about 50 to about 120 microns. The core layer comprising polyamide has a thickness of about 15 to about 50 microns. Johnston discloses that the combined dimensions of the core, inner

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and outer layers provide an improved container, if the total thickness is less than 75 microns the impact strength will not be sufficient, and if the total thickness is in excess of 200 microns the container will lack flexibility. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to form the multilayer film, as taught by the combination of Bayer and Johnston, in the aforementioned dimensions in order to ensure sufficient impact strength and flexibility.

### *Response to Arguments*

15. In response to applicant's argument that Bayer does not disclose LLDPE or polypropylene, Bayer is not employed as an anticipatory reference; hence it does not disclose all of the limitations of claim 1, as discussed above. The Johnston reference is relied upon to teach the inclusion of LLDPE or polypropylene as the components of the polyolefin layer.

16. In response to applicant's argument that Johnston does not disclose blow-molding multilayer films nor does it disclose the branched polyamide, it is noted that since the Bayer reference discloses both blow molding and the branched polyamide layer, it is not necessary that the Johnston reference disclose those limitations.

17. Applicant's argues that the combined disclosure of Bayer and Johnston does not lead one skilled in the art to the process of claim 1 or the multilayer film of claim 5. In response, Johnston have provided sufficient motivation to include the polyolefin layer comprising LLDPE or polypropylene in the multilayer film of Bayer.

### *Conclusion*

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saira Raza whose telephone number is (571) 272-3553. The examiner can normally be reached on Monday-Friday from 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**James J. Seidleck**  
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